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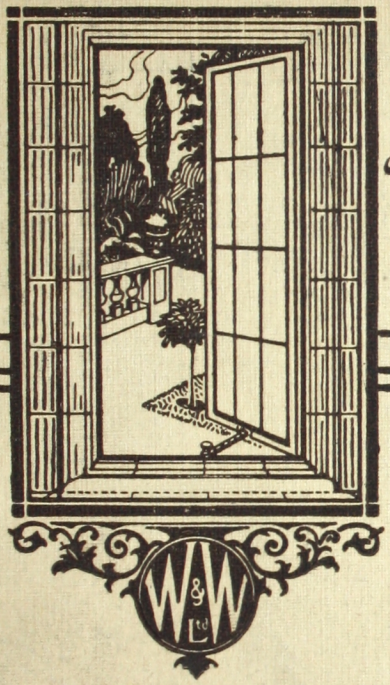

"Reliance" Metal Windows

W&W

CHESTER ENGLAND

This small temporary catalogue is issued in order to meet the requests of numerous architects and others, pending completion of our large and fully comprehensive illustrated catalogue now in the hands of the printers.

WILLIAMS & WILLIAMS

LIMITED

Steel Window Sashes & Casements
of all descriptions for
Factories, Mansions, Offices,
Churches — and
Buildings for
all purposes

— *Contractors to* —

MINISTRY OF HEALTH,

War Office, Air Ministry, Ministry of Munitions, Home Office, H.M. Office of Works, L.C.C., etc.

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W & W

"RELIANCE" STANDARD METAL WINDOWS for HOUSING SCHEMES —

as approved & used by the Ministry of Health (D.B.M.S.).
H.M.O.W., L.C.C., Public and Local Authorities.

WILLIAMS & WILLIAMS, LTD., have standardized their designs in anticipation of a great demand arising out of reconstruction and development schemes for housing and factory accommodation.

* * *

It has been found possible thereby to so reduce the cost that a considerable saving is effected in comparison with wooden windows, apart from the all-important question of maintenance so often overlooked.

W&W

ID90-02571 TCF

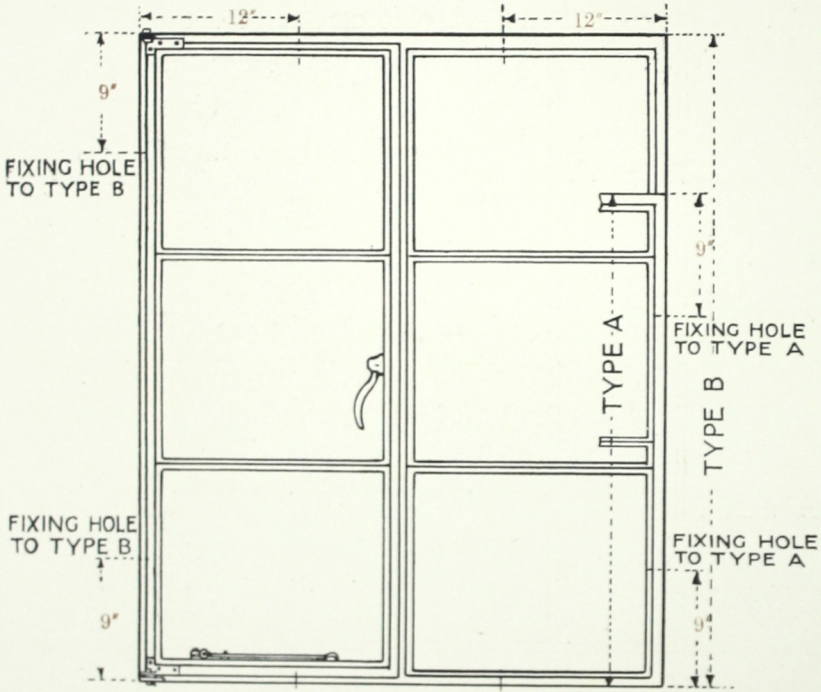
The ranges of sizes being manufactured were arrived at with due regard to the views of many eminent Architects as to the most suitable proportions in height and width to enable them to retain individual effect for original design. The Standard Sizes which we have adopted will, we believe, cover all ordinary requirements for light and ventilation of houses.

* * *

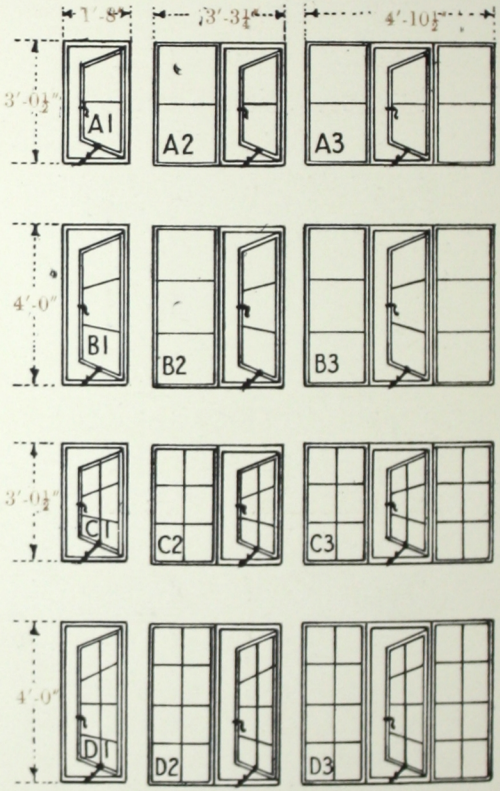
In regard to the fixing, it is now generally admitted that for purposes of ensuring a sound and close joint and for saving time the most satisfactory method is to "build in" the windows as the building proceeds. This acts as a guide and an impetus to quick erection, provided arrangements have been made for delivery of the windows in advance of actual requirements, and in this last point the contractor may be sure of the hearty co-operation of Williams & Williams, Ltd.

ID 90-02571 TCF

Standard Cottage Windows, "Reliance" Type

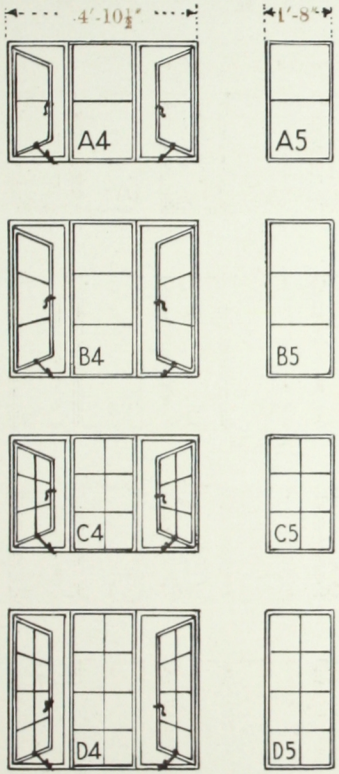


EXTERIOR VIEW, LARGE PANES, TYPES A & B.

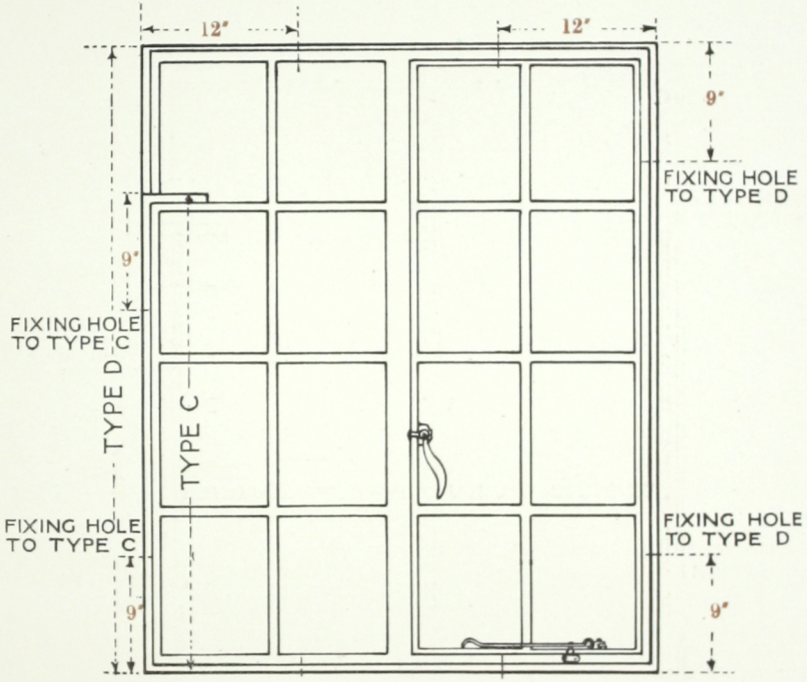


¼ IN. SCALE ELEVATIONS OF STANDARD WINDOWS, TYPES A, B, C. & D.

W & W



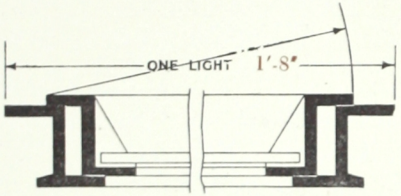
½ IN. SCALE ELEVATIONS OF STANDARD WINDOWS
TYPES A, B, C & D,



INTERIOR VIEW, SMALL PANES, TYPES C & D.

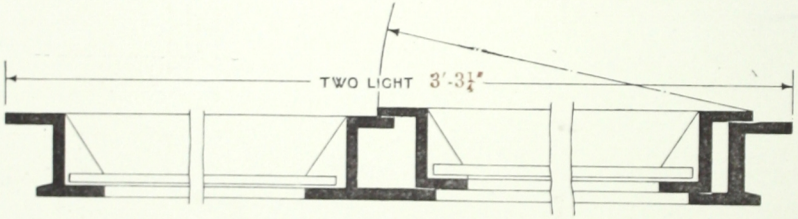
FOR ADDITIONAL WIDTHS WINDOWS CAN BE PREPARED WITH STEEL MULLIONS COMPLETE, THE RANGE THEREBY BECOMING UNLIMITED.

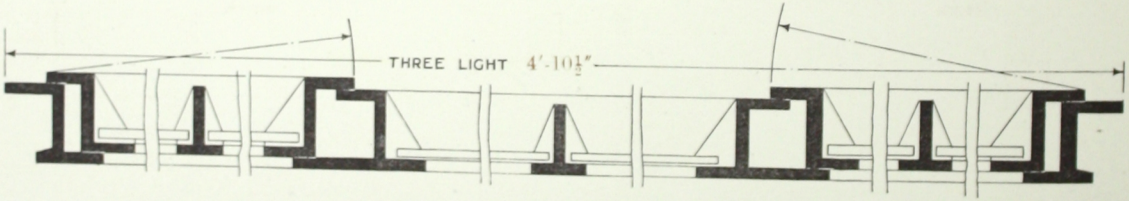
Half Full Size Window Sections



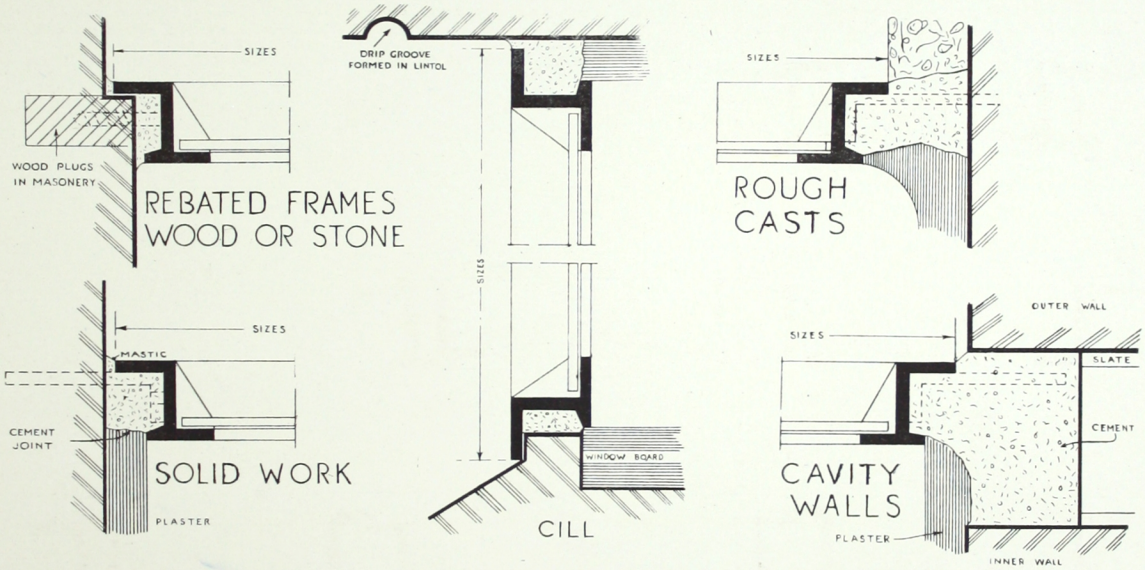
All Windows 1′ 8″ Wide to have Holes at Jambs, but only the Opening Lights to have a Fixing Hole in Centre at Head and Sill.

Windows 3′ 3¼″ and 4′ 10½″ Wide to have Fixing Holes 12″ from either Jamb and no Centre Hole required.





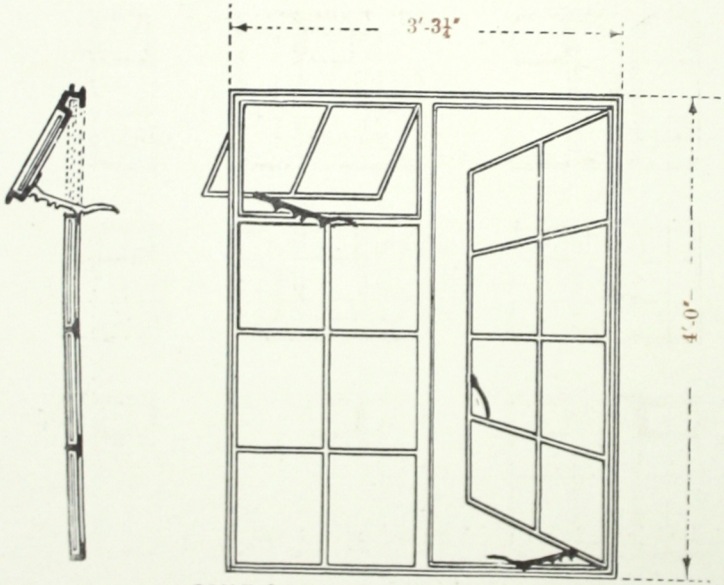
Half Full Size Wall Details



Upon request we shall be pleased to furnish full-sized details.

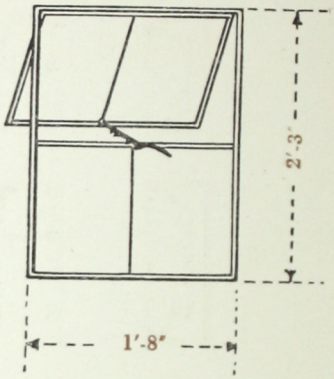
"Reliance" Cottage Casements with Top Ventilation.

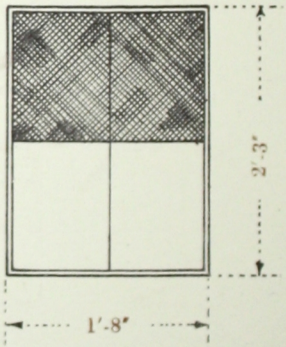
In order to meet the needs of all requirements, we have introduced a push-out Casement for some Windows, as illustrated, thus giving top ventilation without interfering with our standard sizes. This style of Window gives perfect ventilation, is particularly useful in bad weather, and is adopted very largely for bedrooms. It will be seen, however, that it is also a great advantage in many other instances.



SCALE ¾ INCH TO 1 FOOT.
ELEVATION OF WINDOW D 2 F SHOWING PUSH-OUT CASEMENT INTRODUCED.

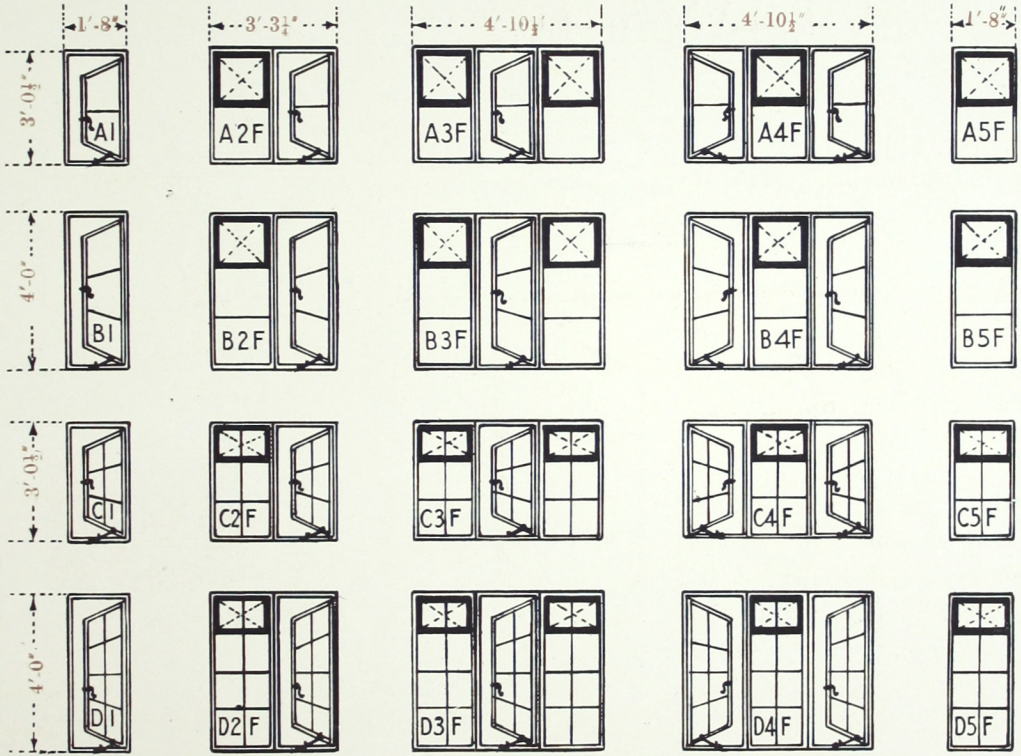
Lavatory & Pantry Windows.





SCALE ¾ INCH TO 1 FOOT.

"Reliance" Type Cottage Windows showing by heavy lines position in which push-out casements can be introduced into our Standard sizes.

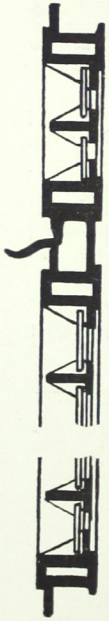


ELEVATION LOOKING FROM INSIDE SCALE ¼ INCH TO 1 FOOT

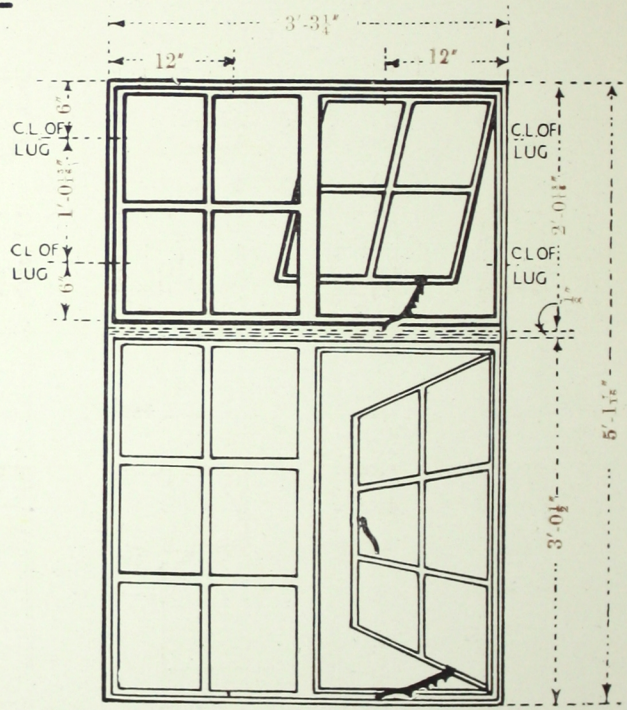
Transome Windows

In the event of additional height being required beyond the Standard measurements, Transome Windows can be used as illustrated here. Every unit of "Reliance" Cottage Windows can be connected with the greatest of ease, and selections made to give any size windows. Illustration shows a Standard C2 Window with Standard Transome Window E2 fitted.

On receipt of your special requirements we shall be pleased to advise accordingly.

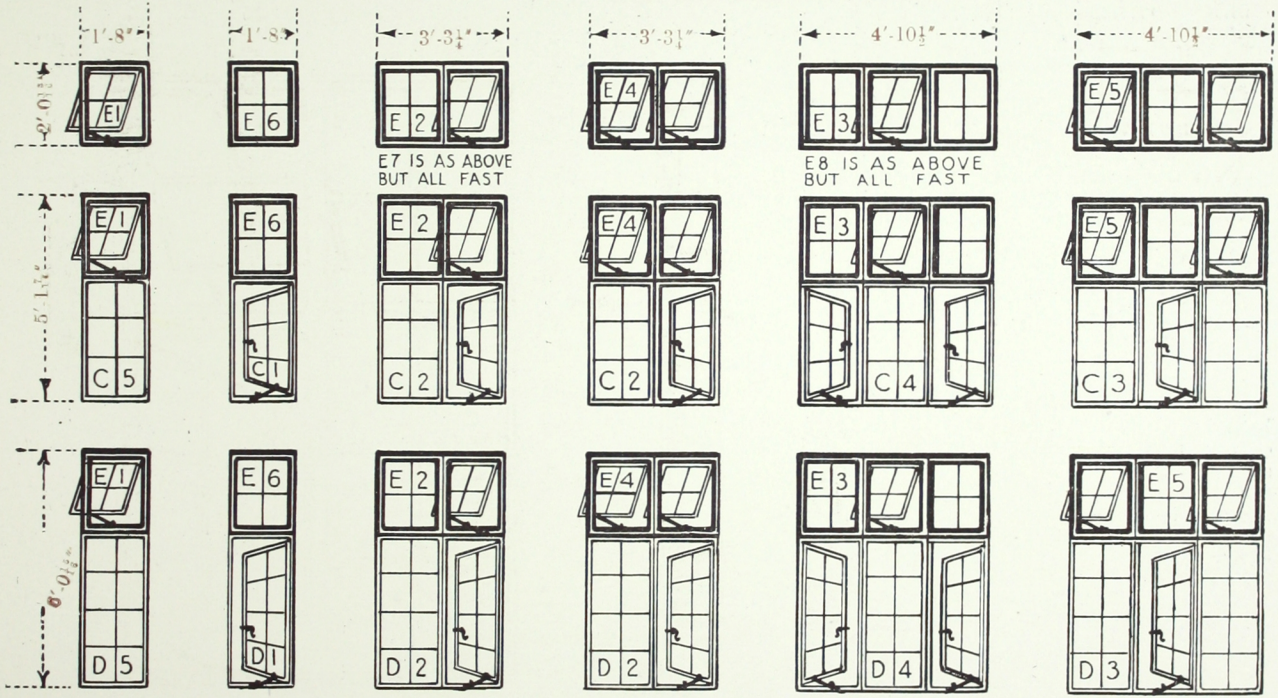


¼ FULL SIZE SECTION.



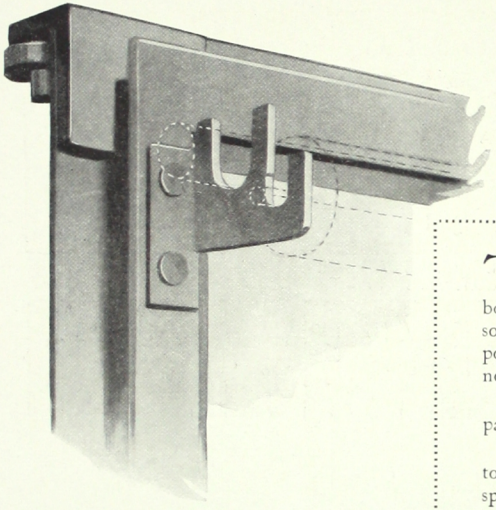
SCALE ¾ INCH TO 1 FOOT.

Elevations of "Reliance" Standard Windows and Transome Windows, showing some combinations; these can be varied to suit all requirements.



ELEVATION LOOKING FROM INSIDE SCALE ¼ INCH TO 1 FOOT

Three Special Fittings

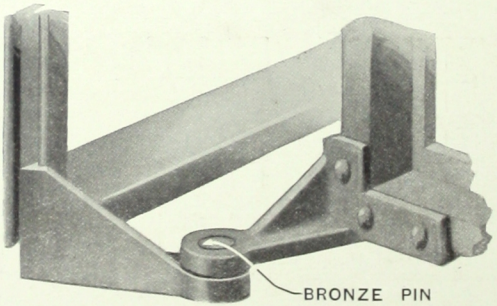


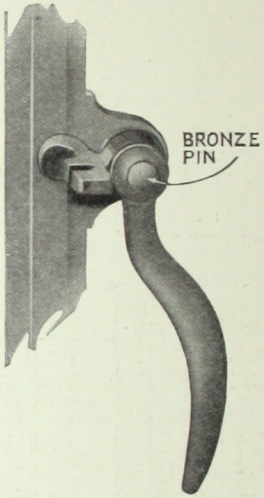
The Steel Blind and Curtain-rod bracket illustrated is fixed to "Reliance" Standard Windows without extra cost when specified, and effectually overcomes the difficulties generally experienced with these fittings.

THE use of these extended hinges makes window cleaning *SAFE and easy*, because both the inside and the outside of each window so fitted can be easily cleaned from the normal position *inside the room*. No straining; no effort; no risk.

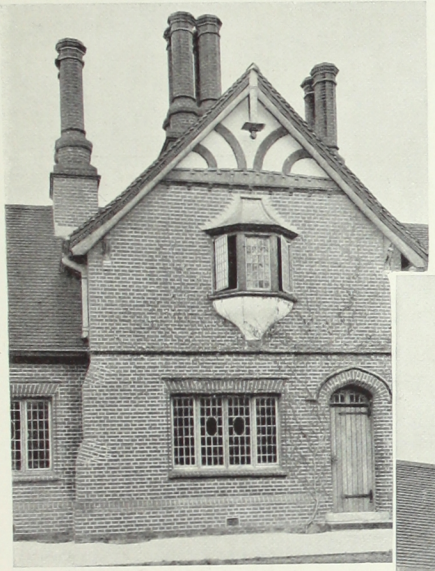
The fitting is simple and there are no working parts to become paint-clogged.

Extended hinges, as illustrated, can be fitted to all windows at a slight extra cost, but must be specially ordered.

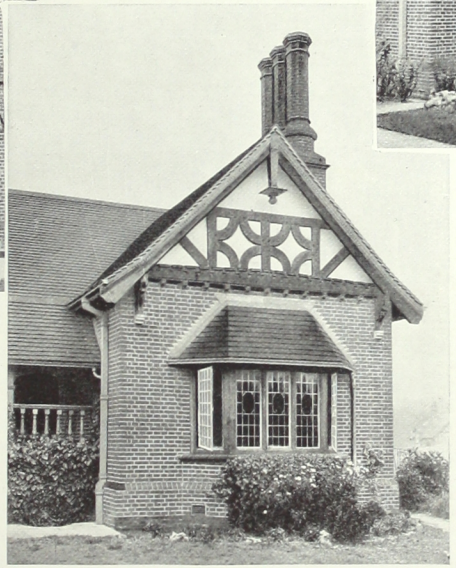




The advantage of the two-point handle is that it enables a *little* ventilation to be secured when required, without rattling. These are fitted to all "Reliance" Standard Cottage Windows.

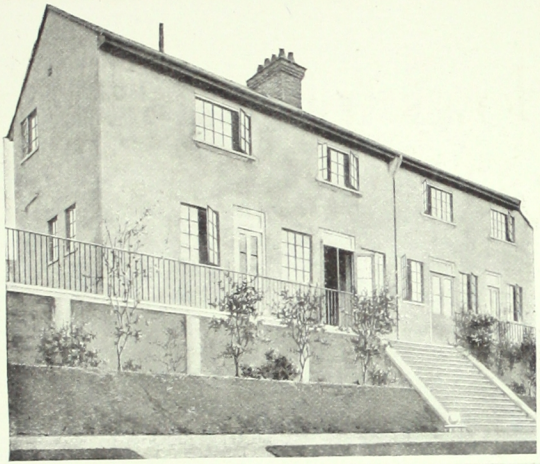


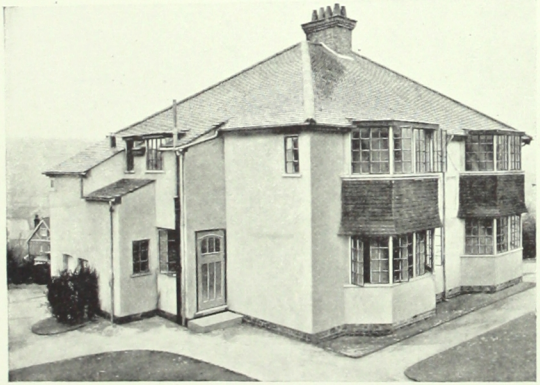
Illustrations on this page are of Houses on Lord Iveagh's Estate. Similar contracts to that illustrated are recorded below.



Lambeth
Willesden
Leigh-on-Sea
Shoeburyness
Billericay
Halesowen
Tunbridge Wells
Foleshill (Exhall)
St. Quentin
Deptford
Swalwell
Walker-on-Tyne
Wigan
Wrexham
Kidderminster
Taunton
Cardiff
Manchester

Worthing
Letchworth
Shoreham, Sussex
Hants
Bellingham, Kent
Keighley, Yorks
Nottingham
Dunster, Somerset
Purley
Staines
Maidenhead
Crewe
Luton
Southampton
Westmeads, Whitstable
Dagenham Estate
Hendon
Hanley
Codsall
Chingford
Stretford
Mitcham





Houses at Purley in which "Reliance" Standard Windows are being installed.

Internal view of Standard D4 "Reliance" Cottage Window.

Windows Type D4 similar to the above have been installed in Houses at Nottingham, Newcastle, Wigan, London, Brighton, etc., etc.

"Reliance" Windows for Private Residences & Public Buildings

HEAVIER types of windows are supplied by us for High-Class Residential Property, Mansions, Halls, Banks, Insurance Offices, and other Commercial and Public Buildings.

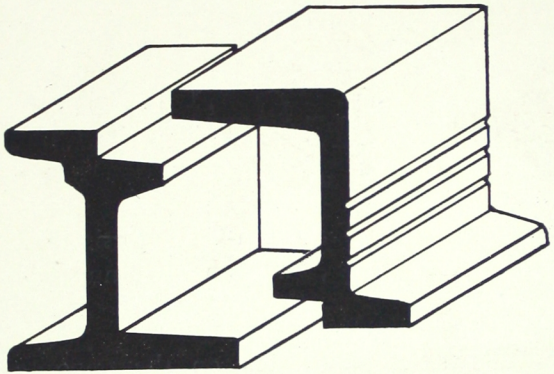
A few full-size sections of these windows are illustrated on the opposite page. These windows are all of first-class workmanship and finish ; the fittings can be either solid gunmetal throughout or best quality malleable iron with gunmetal working parts.

Windows in these heavier Sections can be designed either for composite openings or single lights according to individual requirements.

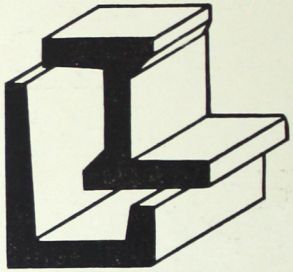
On pages 18 and 19 are actual photographs of various buildings where this heavier type of window has been supplied by us.

These can be made to open either inwards, outwards, or on vertical pivots for easy cleaning.

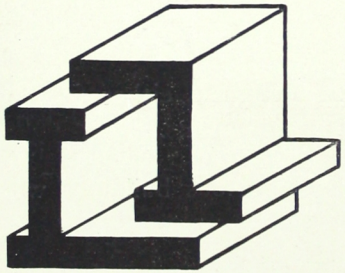
Full size Sections of some heavy "Reliance" Windows for Banks, Residences, &c.



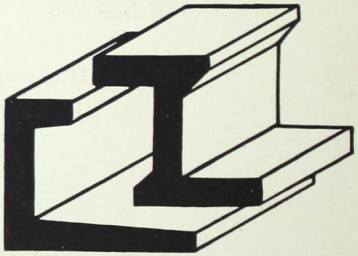
"RELIANCE" No. 1 SECTION.



"WESTMINSTER" No. 3 SECTION.



"JOHBURG" No. 2 SECTION.

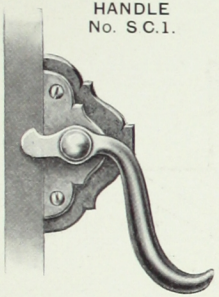


"GROSVENOR" No. 4 SECTION.

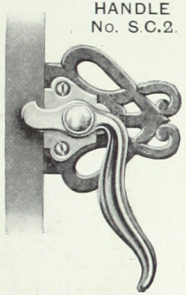
Prices and full details on receipt of particulars and sizes.

"Reliance" Standard Fittings in Bronze or Iron.

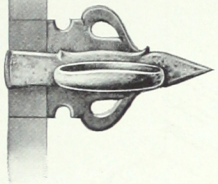
HANDLE No. S.C.1.



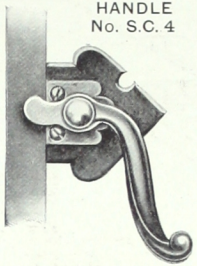
HANDLE No. S.C.2.



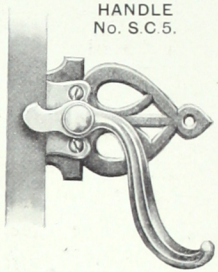
HANDLE No. S.C.3.



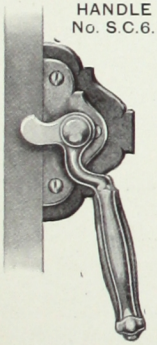
HANDLE No. S.C.4

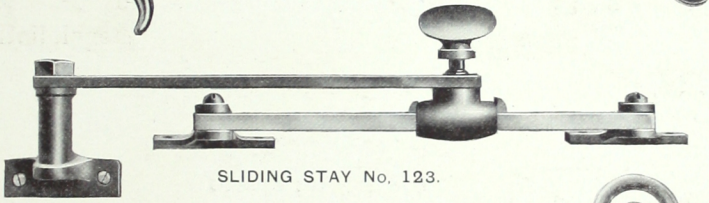


HANDLE No. S.C.5.

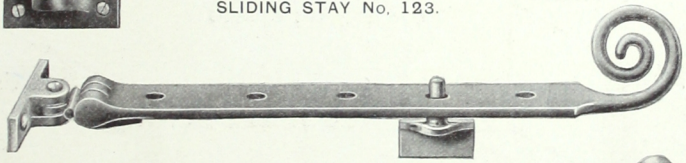


HANDLE No. S.C.6.

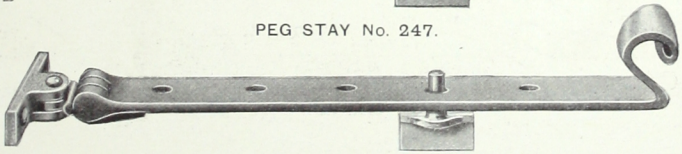




SLIDING STAY No. 123.

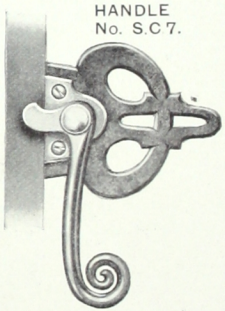


PEG STAY No. 247.



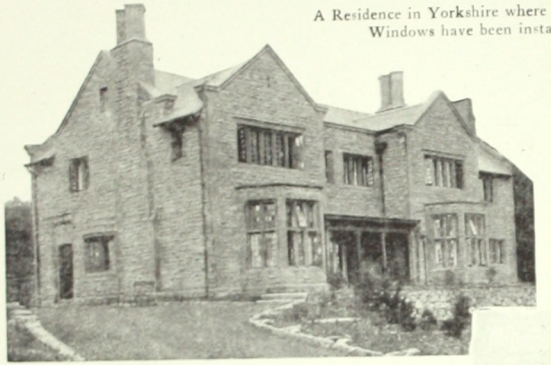
PEG STAY No. 684.

HANDLE No. S.C.7.



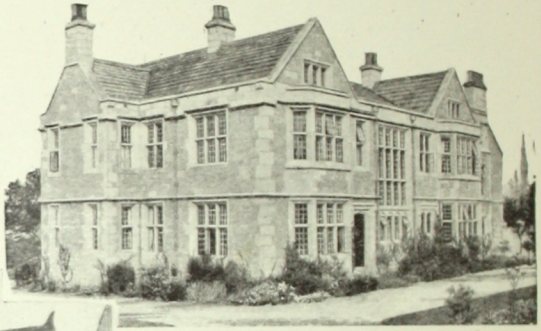
Fittings can also be supplied to Architects' own designs.

A Residence in Yorkshire where "Reliance" Windows have been installed.



A. E. Kirk, Esq., A.R.I.B.A., Architect.

A house typical of many fitted with "Reliance" Standard Windows.



P. J. Turner, Esq., Architect.

Contracts installed with heavy "Reliance" Windows include—

Col. Burland's Residence, Montreal, Canada.

High School for Girls, Barnato Park, Johannesburg.

Camberwell Schools of Arts and Crafts for L.C.C.

Victory House, Kingsway, *Messrs. Trehearne & Norman, Architects.*

Contracts continued—

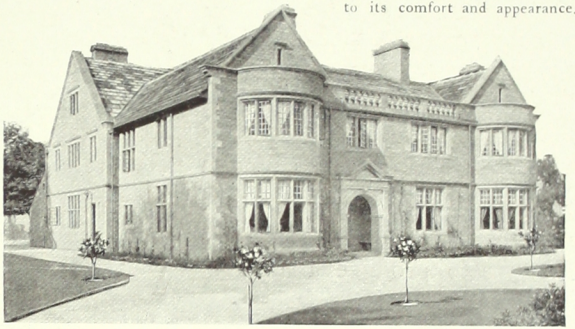
Jewish Synagogue, Johannesburg.

Pudsey Town Hall, Yorks.

Liverpool & London & Globe Insurance Co.'s Offices, Montreal.

Etc., etc., etc.

A block of houses in Bedford Gardens, London, W., in which "Reliance" Windows and Leaded Glazing have been installed throughout.



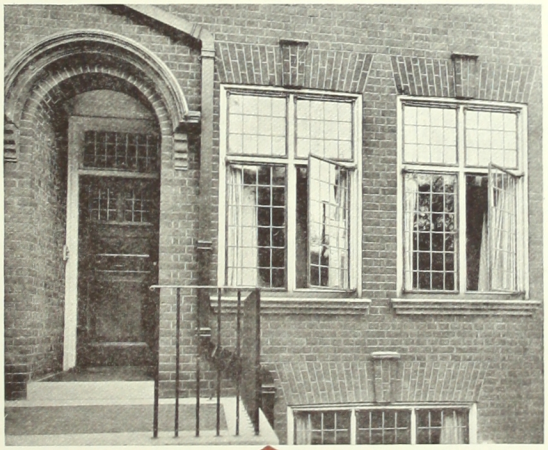
A typical Country Residence in which "Reliance" Windows have added very considerably to its comfort and appearance.

Contracts continued—

Residence at Entonmill, Pulboro',
C. A. M. SKUES, Esq., Architect.

Residence at Leagrave, Beds,
GILBERT & CONSPANDUROS, Architects.

Residence at Ascot,
H. R. BURTON, Esq., Architect.



An example of "Reliance" Casements and Leaded Lights as installed in a house in the West End of London.

Residence at Cricklade,
H. C. WINDLEY, Esq., Architect.

Residence at Braunston,
J. B. WILLIAMS, Esq., Architect.

Chiswick Schools,
For E. WILLIS, Esq., A.M.I.C.E.

Etc., etc.

W&W

"Reliance" Windows for Factories

IT is now well understood and appreciated by all those concerned in the erection of Workshops, Factories, Warehouses, etc., that the more light and ventilation secured in their buildings the greater is the efficiency obtained in the conduct of business. It is quite obvious that the more light the workman has on his work the better he is able to produce a good and well-finished article; in addition to which pure air obtained through light and natural ventilation produces and maintains good health, and therefore a better spirit in those employed.

The adoption of "Reliance" windows ensures all these advantages and furthermore secures rapid erection of premises, provided the Windows are ordered well in advance, so that the workman can build them in as he proceeds with the superstructure.

All ventilators are double weathered and are hung on especially designed pivots to ensure ease of working, the windows being subject to inspection and painted with best Grey Graphite paint before being despatched. Lugs for building in are provided unless otherwise stated.

We have been fortunate in securing the most important contracts for this class of work. We are, however, only able to illustrate a few which will be found on page 24. Photographs will be supplied on request, or particulars furnished of other contracts which have been carried out by us.

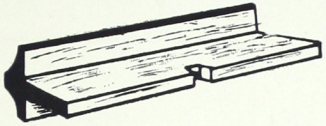
"Reliance" Lock Joint

THE particulars shown at side give clearly details of our Lock Joint as used in the $1\frac{3}{8}$ in. Sash Sections.

This Lock Joint obviates much cutting away of valuable material where strength is required at the most vital part of a sash, viz., the cross joint, and used in $1\frac{3}{8}$ in. Sections is stronger than the ordinary mitre joint in 2in. Sections, thus enabling a lighter section being adopted, thereby reducing the cost and allowing more light to penetrate into the building.

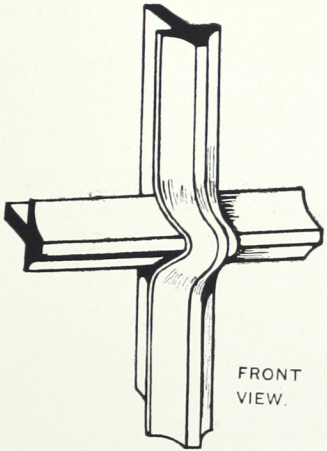
As the cross bars are locked together practically solid by means of power presses a very rigid joint is the result, and it is impossible for the sash bars to come adrift under wind pressure, etc., as often occurs with mitre joints.

The Lock Joint gives the appearance of solidity and strength which it certainly has, the curve at the intersection being a most pleasing and distinctive relief from the usual straight lines of a mitre joint being very noticeable.

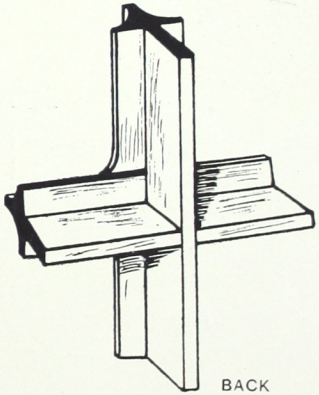


HORIZONTAL BARS.

VERTICAL BARS.



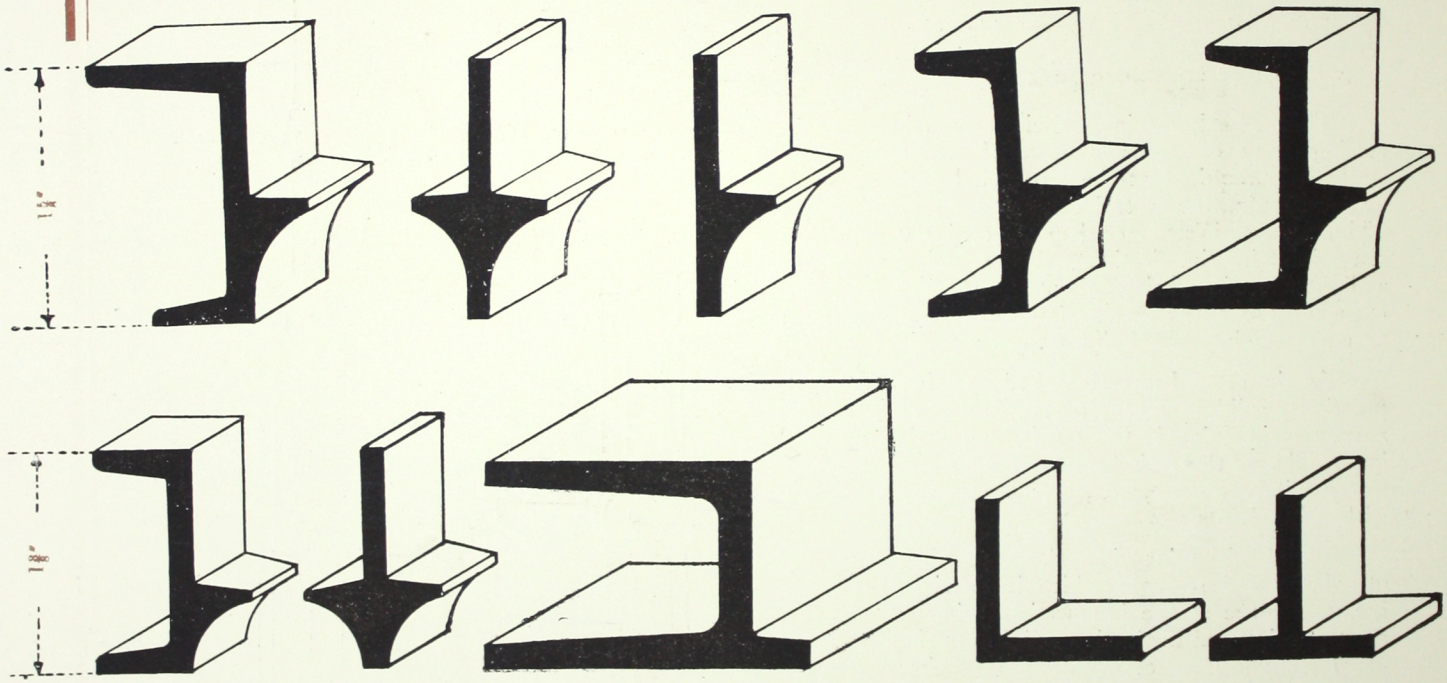
FRONT VIEW.



BACK VIEW.

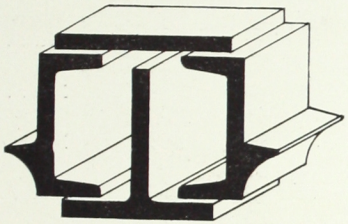
Standard Sash Sections held in Stock from our own Rolls.

FULL SIZE.

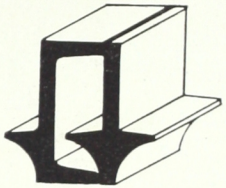


A Large Selection of **L** and **T** Sections are also held in Stock for Windows requiring Flat Surfaces.

Alternative Mullions for "Reliance" Steel Sashes, enabling unit construction to be employed as supplied and used in buildings illustrated.

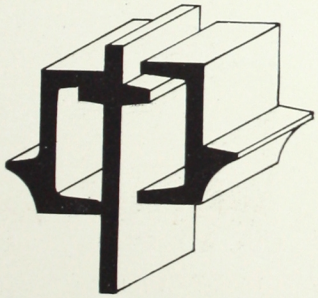


MULLION C.

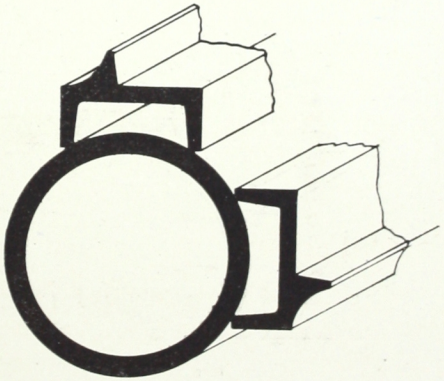


MULLION A.

APPLICABLE TO ALL "RELIANCE" SASH SECTIONS.



MULLION B.



MULLION D.
(FOR ANGLES, CORNERS, &C.)

Contracts recently completed or in hand include:

Messrs. Birmingham Small Arms Co., Ltd., New Gun Factory.

Messrs. Vickers, Ltd., New Factory.

Messrs. Armstrong, Whitworth's New Shipbuilding Yard, Walker-on-Tyne.

A view of part of the Albion Motor Car Works equipped by us.

Contracts continued—

Messrs. Gramophone Co., Ltd., New Cabinet Factory.

Messrs. Hotchkiss et Cie., New Factory.

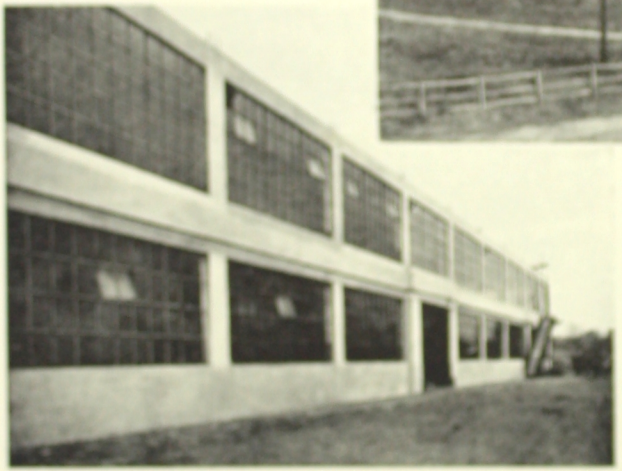
Messrs. Albion Motor Car Co., Glasgow.

Messrs. Leyland Motors (1917) Ltd.

Messrs. Arrol Johnson Motor Car Co.

Messrs. Hayes' Cocoa Co., Factory, Hayes.

And many others.



A Section of Messrs. J. Tylor & Sons, Ltd. new works now in course of construction, for which we provided the Windows.

A corner of Messrs. Vickers' extensive works where we supplied 150,000 ft. of Windows.

The above are typical of many extensive contracts executed by us. A full list would include most of the important jobs carried out in recent years.

Leaded Glazing

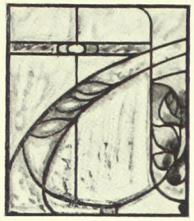
DESIGNS for decorated seascape or landscape windows for Transome Lights, Ingle Nooks, panels for Vestibule and Staircase Windows, will be supplied on receipt of particulars of requirements.

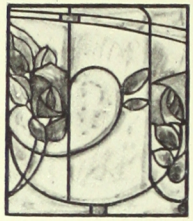
Schemes for Roof and Dome Lights of original and effective designs will also have careful consideration and immediate attention.

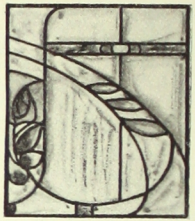
We have given much thought to ornamental lead glazing, and the experience gained helps us to readily advise our friends as to the most appropriate design to meet their special requirements, whether it be a simple geometrical pattern, figure, floral, seascape or landscape.

Elevations of the openings for which designs are required should be furnished, at the same time intimating character or period of design required. On receipt of these particulars, same will command our artists' personal attention.

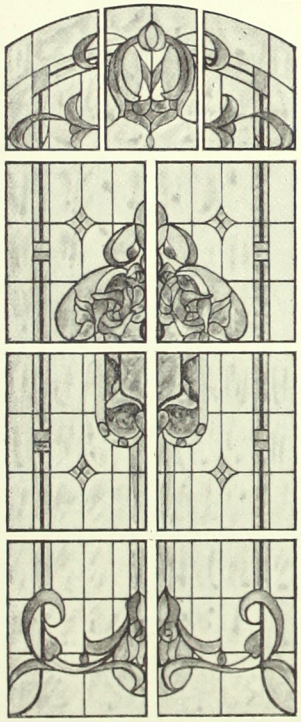
CHURCHES,
HALLS,
PUBLIC
BUILDINGS,
Etc., etc.

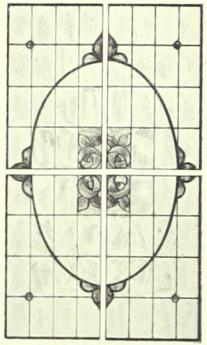


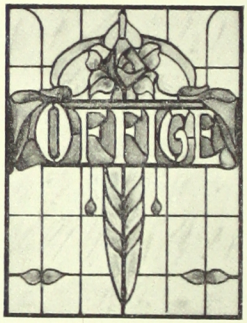


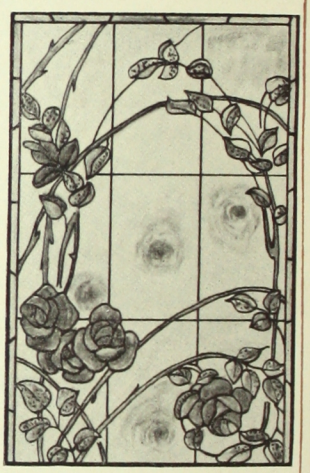


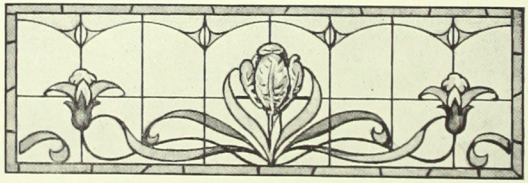
CAFÉS,
OFFICES,
LIBRARIES,
HOUSES,
Etc., etc.











Suggested Designs on application.

W&W

W&W

CHESTER ENGLAND